

Docket No.: 114231.0120
Customer No.: 21269

PATENT

Continuation-in-Part of Application Serial No. 07/741,128 filed August 7, 1991, entitled
PROLIFERATION OF HEPATOCYTE PRECURSORS, abandoned.

On page 12, line 21, please replace the full paragraph with the following:

Figure 5 represents a population highly enriched for fetal liver parenchymal cells which was obtained by FACS (R4 cells after exclusion of all OX-43) and 5×10^4 cells/cm² plated on type I collagen coated dishes in a serum free, hormonally defined medium. Figure 5A is a phase micrograph showing a typical epithelial colony and very few mesenchymal cells after 4 days in culture (original magnification - 50X). Figure 5B is an indirect in situ immunofluorescence showing incorporation of BrdU in the nuclei of about 25% of the cultured parenchymal cells after 24 hours in culture (original magnification - 50X). Figure 5C is a phase micrograph of panel B;

IN THE CLAIMS

Please cancel claims 1 to 34 and add the following new claims:

35. (new) A method of enriching for hepatic progenitors from liver comprising:
- (a) preparing a suspension of liver cells; and
 - (b) panning said suspension utilizing antibodies specific for hemopoietic cells, mesenchymal cells, mature liver cells, or combinations thereof, to remove said hemopoietic cells, mesenchymal cells, mature liver cells, or combinations thereof, from said suspension such that said suspension is enriched in hepatic progenitors.
36. (new) The method of claim 35 wherein the mesenchymal cells comprise endothelial cells.
37. (new) The method of claim 35 wherein the mature liver cells comprise at least one of hepatocytes and bile duct cells.

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38. (new) The method of claim 35 which further comprises performing multiparametric fluorescence activated cell sorting on said suspension utilizing at least one antibody to a hepatic cell marker, side scatter, forward scatter, autofluorescence, or combinations thereof.

39. (new) The method of claim 35 wherein the antibody specific for hemopoietic cells is a monoclonal antibody.

40. (new) The method of claim 35 wherein said single cell suspension comprises an agent capable of removing calcium from liver cell surface.

41. (new) The method of claim 35 wherein said single cell suspension comprises EGTA.

42. (new) The method of claim 35 wherein said single cell suspension comprises an enzyme capable of dissociating liver cells.

43. (new) The method of claim 35 wherein said single cell suspension contains collagenase.

44. (new) The method of claim 35 wherein said single cell suspension is chilled.

45. (new) The method of claim 35 wherein said single cell suspension is at a temperature of between about 2 and 20 °C.

46. (new) The method of claim 35 wherein the liver is neonatal liver.

47. (new) The method of claim 35 wherein the liver is embryonic liver.

48. (new) The method of claim 35 wherein the liver is adult liver.

49. (new) The method of claim 39 wherein said monoclonal antibody is at least one of OX-43 and OX-44.

50. (new) The method of claim 35 wherein the antibody to a hepatic cell marker is monoclonal antibody 374.3

51. (new) The method of claim 35 wherein said hepatic cell marker is OC.3.